a holder for compression sealing of said membrane on the open bottom of said beaker;
a base containing an air pump, wherein the holder mates with the base so as to provide
fluid communication between the air pump and the bottom side of said membrane and wherein
air provided by said air pump against said bottom of said membrane, overcomes hydrostatic
pressure of said compost nutrient water in said beaker thereby sparging enough air through said
perforated membrane and into said compost nutrient water culture to maintain 6 mg of oxygen
per liter through out a brewing cycle; and

said base and holder including means for quick connect/disconnect of said fluid communication between said air pump and said bottom side of said membrane.

Claim 13.(New) The apparatus of claim 12, wherein the beaker shape, said membrane and air pump are constructed so as to suspend said compost nutrient water culture assuring full aeration above 6 mg oxygen per liter without settling of particles in lower portions of said beaker.

Claim 14.(New) The apparatus of claim 12, wherein the beaker shape, said membrane and air pump are so constructed so as to agitate the compost nutrient water culture to extract adhered microorganisms directly into said compost nutrient water culture.

Claim 15.(New) The apparatus of claim 12, wherein the beaker shape, said membrane and air pump are constructed so as to entrain said compost nutrient water culture where by the reproduction of microorganisms is enhanced.

3

Appn. Number 10/813,961 (Harmon et al.) GAU 1744 Amnt A, contd

Claim 16.(New) The apparatus of claim 12, wherein the lower portion of the beaker includes male threads that are engaged by corresponding female threads in said holder.

Claim 17.(New) The apparatus of claim 16, wherein said membrane transversely covers the bottom end of the beaker and is compression sealed by tightening said holder.

Claim 18.(New) The apparatus of claim 17, wherein said holder includes a seat and said membrane has a centrally located portion without perforations acting as a back flow valve when fitted against said seat.

Claim 19.(New) The apparatus of claim 12, wherein said holder is provided with multiple parallel splines protruding from an exterior circumference and said splines mate positively with a corresponding tapered recess in said base.

Claim 20.(New) The apparatus of claim 12, wherein said means for quick connect/disconnect includes a passage in said holder and a mammilated air duct in said base, said air duct including an "O"-ring for forming an air-tight seal between said air duct and said passage.

Claim 21.(New) The apparatus of claim 12, wherein said beaker, said holder and said base are separable to facilitate cleaning of the apparatus.

4

Claim 22.(New) The apparatus of claim 12, wherein the strainer has a mesh size between 80 mesh and 120 mesh.